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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,294	12/21/2000	Kristin Robert Stroda	638-29-9-1	1862
75	90 05/27/2004		EXAMINER	
Vincent L. Carney			LIEU, JULIE BICHNGOC	
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Lincoln, NE 68501-0836			ART UNIT	PAPER NUMBER
			2636	,
		•	DATE MAILED: 05/27/2004	16

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)				
•	09/746,294	STRODA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Julie Lieu	2636				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period was reply reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this con D (35 U.S.C. § 133).	mmunication.			
Status						
<ul> <li>1) Responsive to communication(s) filed on 15 Ma</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allowant closed in accordance with the practice under E</li> </ul>	action is non-final. ace except for formal matters, pro		merits is			
Disposition of Claims						
4) Claim(s) 7-15,17-29 and 31 is/are pending in the 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed.  6) □ Claim(s) 7-15, 17-20, 21, 23, 26, and 28 is/are 7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and/or Application Papers  9) □ The specification is objected to by the Examiner 10) □ The drawing(s) filed on is/are: a) □ access Applicant may not request that any objection to the constant of the second of th	vn from consideration. rejected. relection requirement. repted or b)□ objected to by the Edrawing(s) be held in abeyance. See	37 CFR 1.85(a).	D 4 404(4)			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the prior application from the International Bureau</li> <li>* See the attached detailed Office action for a list of</li> </ul>	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National S	Stage			
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite	-152)			

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#### **DETAILED ACTION**

1. This Office action is in response to amendment filed March 15, 04. Claims 21-22 have been amended. Claims 1-6 and 30 have been canceled.

2. The text of those sections of Title 35, U. S. Code not included in this action can be found in a prior Office action.

# Claim Rejections - 35 USC § 112

3. Claims 17-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fails to originally disclose preventing the step of arming the pressure pad when the step of removing the pressure above the predetermined pressure are separated in time by more than a preset period of time or preventing the step of activating an alarm when the step of applying pressure above the predetermined pressure are separated in time by more than a preset period of time.

If the applicant contends that this is not new matter, a specific location such as page and line number in the specification should be pointed out.

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## Claim Rejections - 35 USC § 102

4. Claims 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Boon (US Patent No. 5,796,059).

## Claim 11:

Boon discloses a system for monitoring a patient, comprising:

- A pressure pad for providing a signal indicating a pressure condition; a.
- A control housing connected to the pressure pad and responsive to the signal; and b.
- A casing 52 at least partly encasing the controller and the pressure pad. c.

#### Claim 12:

The pressure pad in Boon is activated by removal of pressure and inactivated by application of pressure.

5. Claims 7-10 are rejected under 35 U. S. C. 132(a) as being unpatentable over Cross (US Patent No. 5,494,046) in view of Boon (US Patent No. 5,796,059).

## Claim 7:

Cross discloses a method of monitoring a patient, comprising the steps of attaching a fastener (fig. 4) to the patient, wherein if the patient moves beyond a predetermined distance, a switch moves between one of an open state of a closed state to the other of the open and closed state. Cross fails to discloses placing pressure pad under the patient that activates a switch when energize. However, such concept is old and well known in the art as taught in Boon. Therefore, it would have been obvious to one skilled in the art to combine the system taught in Boon into

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the system in Cross because it would further enhance the detection of the system. Cross provides an alarm signal when the first switch is activated, that is when a patient is moved beyond a predetermined distance. It would also have been obvious to one skilled in the art provide an alarm signal when the pressure on the pressure pad is removed.

## Claim 8:

The fastener is attached to the clothing of the patient in Cross. See fig. 4.

### Claim 9:

Cross teaches the step of providing a verbal message to the patient.

## Claim 10:

Cross also teaches the step of transmitting a signal to a remote station and providing an alarm to a caretaker at the remote station.

## Claim Rejections - 35 USC § 103

6. Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boon (US Patent No. 5,796,059) in view of Cross (US Patent No. 5,494,046)

## Claim 13:

Boon fails to disclose a recorded voice message sounding within hearing distance of the patient. Nonetheless, such feature is conventional in the art as taught in Cross wherein the voice alarm in located near the station. In light of this teaching it would have been obvious to one skilled in the art to provide a verbal warning device within the hearing distance of the system in Boon for the same purpose as in Cross.

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#### Claim 14:

In Boon, the pressure pad responds to pressure by reducing electrical resistance between a first point and a second point. The apparatus including a switch armed upon the reduction of electrical resistance and an alarm for providing the alarm when the switch has been armed and the electrical resistance is under a predetermined resistance threshold, wherein a movement of the patient from the pressure pad triggers the alarm. Col. 3, third paragraph to col. 4, first paragraph. A time delay, such as 1 second, is not disclosed in Boon, but the concept of using time delay to avoid false alarm is conventional in the art, as taught in Cross. Therefore, it would have been obvious to one skilled in the art to use a time delay in the Boon system to prevent false alarm caused by inadvertent movement of the patient.

#### Claim 15:

The alarm in Boon provides the alarm when the switch has been armed and electrical resistance is under the predetermined resistance threshold. Regarding the time delay between 2 seconds and 3 seconds in duration, it is not disclosed in Boon, but the concept of using time delay to avoid false alarm is conventional in the art as taught in Cross. Therefore, it would have been obvious to one skilled in the art to use a time delay in the Boon system to prevent false alarm caused by inadvertent movement of the patient.

7. Claims 21, 23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boon (US Patent No. 5,796,059) in view of Cross (US Patent No. 5,494,046) and Triplett et al. (US Patent No. 4,175,263).

#### Claim 21 and 23:

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Boon discloses a method of monitoring a patient, comprising the steps of:

a. Placing a pressure pad (including 52) on a resting place, a bed or a chair, for the patient;

- b. Energizing the pressure pad, whereby a signal is provided responsive to pressure more than a predetermined pressure being placed on the pressure pad by the patient (a minimum pressure that causes the detection);
- c. Applying pressure above the predetermined pressure to the pressure pad (patient lying on the pad)
- d. Arming the pressure pad when the pressure more than a predetermined pressure a predetermined weight the detection is on the pressure pad whereby the pressure pad serves as a sensor;
- e. Activating an alarm when the predetermined pressure has been on and then is removed from the armed pressure pad
- f. Disposing of the pressure pad when the patient no longer has use of the pressure pad.

Regarding the claimed preventing activating the alarm when the pressure has been on the pad for more than a predetermined time and the release of the pressure are separated in time more than a preset period of time, it would have been obvious to one skilled in the art to consider some time delays, such as that in Cross, because false alarm would be preferable avoided and alarm should only be given during actual use of the pressure, whereas unintentional activation of the alarm could happen such as when health personnel might happen to press against the pad while setting up the bed for patient to use or inadvertent movement of patient on the bed causing

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false alarm to go off. Further, one skilled in the art would have readily recognized that the situation wherein the pressure has been applied on the pad for some time and removed from the pad for some time would most likely a situation that the patient is actually using the pad and left the pad. Therefore, one skilled in the art would apply such concept into the Boon system because it would prevent false alarms.

Regarding the claimed disposing the pad when patient no longer has use of the pressure pad without permitting use by another patient, it would have been obvious to one skilled in the art that this is up to the implementer and/or user to decide whether the pad should be a disposable pad and would be discarded after each use of a patient for sanitary purposes.

Boon fails to disclose a second sensor placed in juxtaposition with the patient. However, Triplett et al. teaches the use of a sensor 32 placed in juxtaposition with the patient so that when the patient assumes a dangerous position or a moving direction initiated by the patient trying to leave the bed, as indicated by the second sensor, an alarm signal is given and a monitoring station activated when the alarm signal is provided, and a voice message is announced near the patient. Fig. 1 in Triplett. In light of this teaching, it would have been obvious to one skilled in the art to combine the features taught in Triplett in the system of Boon because it would further provide information to the care taker remote from the patient's location of the patient's dangerous position. The second sensor used in Triplett is a mechanical switch (see US 3,781,843).

#### Claim 26:

Boon fails to disclose a second sensor. However, Triplett et al. teaches the use of a sensor 32 placed in juxtaposition with the patient so that when the patient assumes a dangerous

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position or a moving direction initiated by the patient trying to leave the bed, as indicated by the second sensor, an alarm signal is given and a monitoring station activated when the alarm signal is provided, and a voice message is announced near the patient. Fig. 1 in Triplett. In light of this teaching, it would have been obvious to one skilled in the art to combine the features taught in Triplett in the system of Boon because it would further provide information to the care taker remote from the patient's location of the patient's dangerous position. The second sensor used in Triplett is a mechanical switch (see US 3,781,843, as indicated in Triplett, of which reference is provided herein).

8. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boon (US Patent No. 5,796,059) in view of Triplett et al. (US Patent No. 4,175,263).

#### Claim 28:

Boon discloses a system for monitoring a patient, comprising:

- a. A pressure pad providing a signal indicating a pressure condition;
- b. A control housing connected to and located adjacent to the pressure pad and responsive to the signal;
- c. A casing at least partly encasing the control housing and the pressure pad.

Boon fails to disclose a second sensor. However, Triplett et al. teaches the use of a sensor 32 placed in juxtaposition with the patient so that when the patient assumes a dangerous position or a moving direction initiated by the patient trying to leave the bed (direction of motion or the patient), as indicated by the second sensor, an alarm signal is given and a monitoring station activated when the alarm signal is provided, and a voice message is announced near the

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patient. Fig. 1 in Triplett. In light of this teaching, it would have been obvious to one skilled in the art to combine the features taught in Triplett in the system of Boon because it would further provide information to the care taker remote from the patient's location of the patient's dangerous position.

## Allowable Subject Matter

9. Claim 27 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

A Martine

10. Claims 22, 24-25, 29 and 31 are allowed.

#### Remarks

- 11. Applicant's arguments file 3/15/04 have been considered but are moot in view of the new ground(s) of rejection.
- 12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 703-308-6738. The examiner can normally be reached on MaxiFlex.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Hofsass can be reached on 703-305-4717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Julie Lieu

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**Primary Examiner** 

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